

ENGINEERED BY POWERS

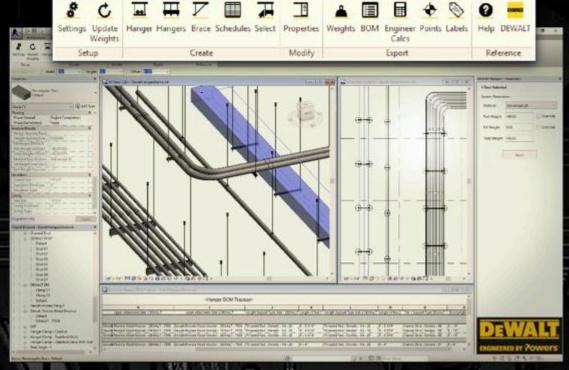
## **DEWALT HANGERWORKS**

Plug-In for Revit

Automated Placement and Design of MEP Hangers



DEWALT HangerWorks plug-in for Autodesk Revit is a tool that ilt-in to the tool that enabl



For additional information or to get started using HangerWorks contact: **Conk Buckley** DWGTP@gogtp.com

HangerWorks Support: (303) 547-2525

**Live Instructional Webinars** Scheduled Every Wednesday

## **Point Loads and Seismic**



Feature	Pain Point	HangerWorks Solution / Benefits
Automatic Hanger Placement	<ul> <li>Placement has historically disregarded building-code requirements or structural point-load limitations</li> <li>Hanger sizing tables do not account for "hanger efficient" MEP design where parallel systems are supported</li> </ul>	<ul> <li>Sizes hanger and trapeze assemblies based on system material and content (water, wire, air). With this information, HangerWorks calculates hanger locations based on project standards with real-time engineering calculations on all components in the assembly and alerts the modeler when there are validation failures.</li> <li>Trapeze support for multiple systems is lacking in other tools</li> </ul>
Point Load Calculation	<ul> <li>Hanger components and point load limits can be overloaded</li> <li>MEP design doesn't calculate loads and stress differences especially when a trapeze supports parallel systems</li> </ul>	<ul> <li>Real-time load calculations as the model changes</li> <li>Calculates loads based on system material and content</li> <li>Adjusts point loads and stress differences between left and right components</li> <li>Validates load on hanger components</li> </ul>
Automatic Seismic Bracing	<ul> <li>Seismic bracing calculation requires outside engineering</li> <li>Impractical to calculate load for each hanger during design</li> <li>Bracing not modeled</li> </ul>	<ul> <li>Automates engineering calculations</li> <li>Used during the life cycle of the BIM workflow</li> <li>Calculations based on:</li> <li>Building Code Requirements</li> <li>Trade and Common Practice Rules</li> </ul>
Coordination Efficiency	Adding hangers and braces to an MEP system model post-coordination adds additional rounds of coordination, locations may not be possible	<ul> <li>Integrate hanger assembly placement during normal coordination meetings, not post-coordination meetings</li> <li>Ability to move a hanger or system and see how it impacts point loads</li> <li>Saves days not hours</li> </ul>
Model Accuracy	Assemblies may not be designed with actual components from common hardware manufacturers	<ul> <li>Provides manufacturer specified hanger component catalogs</li> <li>Accurate dimensional information, engineering properties and cost information</li> <li>Optimizes hanger component selection and size to support the weight</li> <li>Enables users to discover clashes that would have previously been overlooked which improves the BIM workflow</li> </ul>
Component Cost Comparisons	<ul> <li>Most Fab shops are unable to compare component costs</li> <li>Current hanger and bracing components are modeled as generic components, not manufacturer specific</li> </ul>	<ul> <li>Provides the ability to compare cost by:</li> <li>Creating accurate Bill of Materials report for various systems</li> <li>Configure fields for individual cost content:</li> <li>Components - actual supplier content, not generic</li> <li>Installation times</li> <li>Shop and field labor rates</li> <li>Performs true cost benefit analysis on design selections</li> </ul>
Actionable Output	Optimized BIM workflow tools should generate actionable output for purchasing, scheduling, submittals, engineering, fabrication teams, layout crews and installation teams	<ul> <li>Shop drawings / Spool sheets / Cut List report is auto-generated for prefabrication containing lists of all components and cut lengths which can be sent to the fabrication shop</li> <li>Exportable hanger points from the model</li> <li>Engineering Report with all point loads and full calculations</li> <li>Hanger Labels</li> <li>Bill of Materials report for all hanger and bracing components simplifies ordering and planning of material deliveries</li> </ul>